

REMARKS

As a preliminary matter, withdrawn claims 7-12 are cancelled. Claim 14 is also cancelled and relates to format writing which initializes a portion of a medium before or after a data area in a recording direction while the user is using the medium, instead of during manufacturing of a medium. This type of format writing is executed by an error recovery, which is applicable to withdrawn claims 7 to 12.

The disclosure is objected to because of informalities. In response, Applicant amended the specification and requests withdrawal of the objection on this basis.

The Examiner also objects to the title of the invention as not being descriptive. Accordingly, Applicant amended the title as suggested by the Examiner to "MAGNETO-OPTICAL STORAGE MEDIUM HAVING DATA IN UNIFORM MAGNETIZED RECORDING DIRECTION." For this reason, withdrawal of the objection is respectfully requested.

Claims 1-2, 4-5 and 13-14 stand rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's admitted prior art (AAPA). Applicant respectfully traverses the rejection because AAPA does not disclose (or suggest) a data area in which data is recorded and is uniformly magnetized in a recording direction, as recited in independent claims 1, 4 and 13.

According to AAPA, as shown in FIGs. 5A and 5B, after the medium is manufactured, the buffer area, the sector address area, and the gap area that are between the data areas are initialized in an erasing direction. Initialization as taught by AAPA

refers to uniformly magnetizing the above areas in an erasing direction and not in a recording direction, as disclosed in the present invention.

Claim 1 is amended to clarify this feature of the present invention, in which a magneto-optic recording medium has at least a recording layer for recording data and a reproducing layer for reproducing the data recorded in the recording layer formed on a substrate. The recorded data is reproduced by setting a proper reproducing laser power upon reproduction, wherein magnetizing directions of a buffer area, which is between data areas where the data is recorded, are uniformly magnetized in a recording direction.

Since the buffer area, the sector address area, and the gap area between the data areas are uniformly magnetized in the recording direction, an aperture and a rear mask are more easily formed. Even at the head of the data area, reproduction by Magnetically Induced Super Resolution (MSR) is realized using a smaller reproducing power. That is, it is possible to provide a medium having a wider reproducing power margin.

More specifically, the present invention discloses that there is a difference between the reproducing power in an ID area where the pit recording is performed and in the data area where the data is reproduced by MSR. That is, when it is necessary to reduce the reproducing power in the ID area and increase the reproducing power in the data area when the beam is moved from the ID area to the data area and the reproducing power is changed from a small value to a large value, the remaining heat is insufficient at the head of the data area. Thus, the aperture becomes slightly large and the reproducing margin decreases. Although it is desirable to further increase the reproducing power in

the data area in order to prevent such a phenomenon, if the beam passes through the head portion of the data area and sufficient remaining heat can be obtained, the reproducing power becomes too high, the aperture becomes too small, and the reproducing margin decreases.


According to the present invention, even in the portion where the remaining heat at the head of the data area is insufficient, the high reproducing margin is obtained without a further increase of the reproducing power. This is because the present invention, just after the medium was manufactured, has the ID area before the data area initialized in a recording direction, which is opposite to the conventional erasing direction.

Such a method is described in conjunction with FIGs. 7 and 8 of the specification and the technique that the ID area is uniformly magnetized in the recording direction, as featured in claims 1, 4, and 13, are based on this disclosure. Since AAPA does not disclose or suggest data areas where data is recorded that is uniformly magnetized in a recording direction, withdrawal of the §102(b) rejection is respectfully requested.

For all of the foregoing reasons, Applicant submits that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By 
Joseph P. Fox
Registration No. 41,760

June 2, 2004

300 South Wacker Drive
Suite 2500
Chicago, Illinois 60606
Telephone: 312.360.0080
Facsimile: 312.360.9315